

Diary

Objective

The focus of this projectlet is calendar management and exploration of serialization techniques. An utility is specified to support an individual contributor to a project to start with goals, track the achievements and challenges in order to provide a clear overall picture to peers and/or management.

The facility is specified as a “personal” tool - dedicated to a single user.

Date and Time manipulation libraries are fully exercised in this utility. It is expected that the user utilizes the tool during normal working hours.

For serialization JSON, xml and databases are suitable and chosen on the basis of available libraries.

User needs and requirements

This projectlet is to fulfill the need of individual contributors presumably service as team members.

Id	Need/Requirement
1	The utility supports sprints of different durations e.g. 1, 2 or 3 weeks.
2	Sprints begin on Sundays and last through Saturdays.
3	TODO items with a description and estimated effort can be specified
4	An item can be completed or blocked.
5	The tool should support generating a report of tasks along with statuses

Specifications

The following will enhance the appeal of the tool.

Sub Command	Description	Options
create	Creates a diary file.	Argument is a filename. Default ~/.diary/Diary
		If the default filename is not used, all the subsequent commands will require the filename to be specified using the <code>—filename</code> switch.
		<code>—duration 1w 2w 3w 4w (<n>w)</code> Specifies the duration of the sprint. Default is 1 week. Sprints are numbered serially.
modify	Modify the attributes of the diary.	<code>—duration 1w 2w 3w 4w (<n>w)</code> Modifies the duration of the sprints. Going lower e.g. from 3w to 1w results in splitting the current sprint into 1w sprints. Going higher e.g from 2w to 3w extends all further sprints to 3w.
todo	Adds an entry to the current sprint as a todo item. Current sprint is defined to start on the previous Sunday and lasts for the duration specified during creation	<code>—effort <n></code> Where n is an estimate of effort. The tool is agnostic to units. If not specified it is assumed to be 0
		<code>—id <str></code> Task id. This is optional. If not specified a number is automatically assigned.
remove	Remove the task from the current sprint	<code>—id <str></code> Task id. This is required.
done	Marks a task as done	<code>—id <str></code> Searches for a todo task with this id. The id could be a number or a specified id
		Argument is a description phrase. If id is not provided the argument could be used to just add an item which is completed. In this case the flag effort can be included to record the fact. <code>—effort <n></code>
blocked	Indicates a task as being unable to complete because of a blocker. The argument is a description of the blocker.	<code>—id <str></code> Selects the id which is blocked. If not specified this is a general blocker that might affect all the tasks.

Sub Command	Description	Options
		Argument is a description phrase and describes the blocker.
carry	Carries any tasks which are not marked done to the current sprint. This will include blocked tasks. Carried over tasks are assigned new ID's. The carry over status is maintained.	All the tasks currently eligible (not closed) are moved to the current sprint.
report	Generates a report of a sprint - including summaries of effort levels	—all reports all the sprints indicated in the diary. By default only the “currently active” sprint is reported.
		—previous <n> reports on the most recent sprint Reports on n most recent sprints. —previous 0 and not specifying any sprint are equivalent. 1 is the default if —previous is specified.

Example usage